KPDES FORM 1

AZH 99694

KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

DEC 17 2009

PERMIT APPLICATION

This is an application to: (check one)
- ☐ Apply for a new permit.
- ☐ Apply for reissuance of expiring permit.
- ☒ Apply for a construction permit.
- ☐ Modify an existing permit.
  Give reason for modification under Item II.A.

A complete application consists of this form and one of the following:
Form A, Form B, Form C, Form F, or Form SC

For additional information contact:
KPDES Branch (502) 564-3410

-0-

I. FACILITY LOCATION AND CONTACT INFORMATION	AGENCY USE	0	1	0	8	4	1	3

A. Name of Business, Municipality, Company, Etc. Requesting Permit
Hinkle Contracting Corporation

B. Facility Name and Location	C. Primary Mailing Address (all facility correspondence will be sent to this address). **Include owner's mailing address (if different) in D.**
Facility Location Name: KY 9009 (Mountian Parkway) widening from milepoint 43.1 to KY 191 overpass	Facility Contact Name and Title: Mr. ☒ Ms. ☐ Chad Conley
Facility Location Address (i.e. street, road, etc., **not P.O. Box**): KY 9009 (Mountian Parkway)	Mailing Address: 605 Blue Sky Parkway
Facility Location City, State, Zip Code: From Slade KY take KY 9009 E until mp 43.1 and proceed east until KY191 overpass	Mailing City, State, Zip Code: Lexington, KY 40509
D. Owner's name (if not the same as in part A and C): Kentucky Transportation Cabinet	Facility Contact Telephone Number: (859) 263-7558
Owner's Mailing Address: 200 Mero Street, Frankfort, KY 40622	Owner's Telephone Number (if different): (502) 564-7250

II. FACILITY DESCRIPTION

A. Provide a brief description of activities, products, etc: This project begins at milepoint 43.1 and proceeds east to the KY 191 overpassand. It consists of widening the roadway, construction of Swift Camp Creek Bridge and 3 excess material sites.

B. Standard Industrial Classification (SIC) Code and Description

Principal SIC Code & Description:	1611 - Linear Projects.		
Other SIC Codes:	1622 - Bridge Construction	N/A	N/A

III. FACILITY LOCATION

A. Attach a U.S. Geological Survey 7 ½ minute quadrangle map for the site. (See instructions)

B. County where facility is located: Wolfe	City where facility is located (if applicable): N/A
C. Body of water receiving discharge: Swift Camp Creek and it's unnamed tributaries; unnamed tributaries of Trace Fork	
D. Facility Site Latitude (degrees, minutes, seconds): 37degrees 44' 36"	Facility Site Longitude (degrees, minutes, seconds): 83 degrees 32' 56"
E. Method used to obtain latitude & longitude (see instructions):	Topographic Map Coordinates
F. Facility Dun and Bradstreet Number (DUNS #) (if applicable):	N/A

IV. OWNER/OPERATOR INFORMATION

A. Type of Ownership:
☐ Publicly Owned ☐ Privately Owned ☒ State Owned ☐ Both Public and Private Owned ☐ Federally owned

B. Operator Contact Information (See instructions)

Name of Treatment Plant Operator:	Telephone Number:
N/A	N/A
Operator Mailing Address (Street): N/A	
Operator Mailing Address (City, State, Zip Code): N/A	
Is the operator also the owner? Yes ☐ No ☐	Is the operator certified? If yes, list certification class and number below. Yes ☐ No ☐
Certification Class: N/A	Certification Number: N/A

V. EXISTING ENVIRONMENTAL PERMITS

Current NPDES Number:	Issue Date of Current Permit:	Expiration Date of Current Permit:
KYR10	September 30, 2007	August 1, 2010
Number of Times Permit Reissued: 1	Date of Original Permit Issuance: October 1, 2002	Sludge Disposal Permit Number:
Kentucky DOW Operational Permit #:	Kentucky DSMRE Permit Number(s):	

Which of the following additional environmental permit/registration categories will also apply to this facility?

CATEGORY	EXISTING PERMIT WITH NO.	PERMIT NEEDED WITH PLANNED APPLICATION DATE
Air Emission Source	N/A	N/A
Solid or Special Waste	N/A	N/A
Hazardous Waste - Registration or Permit	N/A	N/A

VI. DISCHARGE MONITORING REPORTS (DMRs)

KPDES permit holders are required to submit DMRs to the Division of Water on a regular schedule (as defined by the KPDES permit). Information in this section serves to specifically identify the name and telephone number of the DMR official and the DMR mailing address (if different from the primary mailing address in Section I.C).

A. DMR Official (i.e., the department, office or individual designated as responsible for submitting DMR forms to the Division of Water):	Mr. Chad Conley
DMR Official Telephone Number:	(859) 263-7558

B. DMR Mailing Address:
- Address the Division of Water will use to mail DMR forms (if different from mailing address in Section I.C), or
- Contact address if another individual, company, laboratory, etc. completes DMRs for you; e.g., contract laboratory address.

DMR Mailing Name:	N/A
DMR Mailing Address:	N/A
DMR Mailing City, State, Zip Code:	N/A

VII. APPLICATION FILING FEE

KPDES regulations require that a permit applicant pay an application filing fee equal to twenty percent of the permit base fee. Please examine the base and filing fees listed below and in the Form 1 instructions and enclose a check payable to "Kentucky State Treasurer" for the appropriate amount (for permit renewals, please include the KPDES permit number on the check to ensure proper crediting). Descriptions of the base fee amounts are given in the "General Instructions."

Facility Fee Category:	Filing Fee Enclosed:
Non-Process Industry	$200.00

VIII. CERTIFICATION

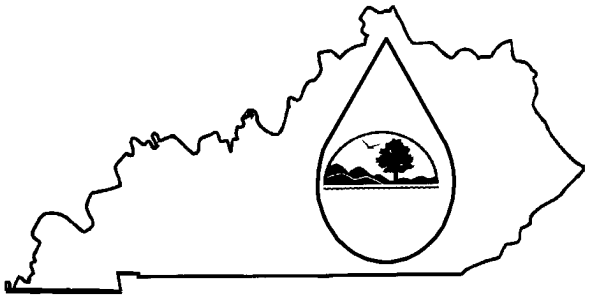
I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME AND OFFICIAL TITLE (type or print):	TELEPHONE NUMBER (area code and number):
Mr. ☒ Ms. ☐ Chris Keller, Vice President	(859) 987-3670
SIGNATURE Chris Keller V.P.	DATE: 12-7-09

Return completed application form and attachments to: **KPDES Branch, Division of Water, Frankfort Office Park, 14 Reilly Road, Frankfort, KY 40601. Direct questions to: KPDES Branch at (502) 564-3410.**

AI 96634

KPDES FORM F



KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

PERMIT APPLICATION

A complete application consists of this form and Form 1.
For additional information, Contact KPDES Branch, (502) 564-3410.

I. OUTFALL LOCATION AGENCY USE 0 1 0 8 4 1 3

For each outfall list the latitude and longitude of its location to the nearest 15 seconds and name the receiving water.

A. Outfall Number	B. Latitude			C. Longitude			D. Receiving Water (name)
1 (Sta 111+00, 75' left)	37	44	30.90	-83	33	57.64	trib of Swift Camp Creek
2 (Sta 114+70, 77' left)	37	44	31.26	-83	33	51.53	trib of Swift Camp Creek
3 (Sta 116+84.2, 64' left)	37	44	31.86	-83	33	47.57	trib of Swift Camp Creek
4 (Sta 122+70, 116' left)	37	44	31.94	-83	33	42.58	trib of Swift Camp Creek
5 (Sta 124+60, 158' left)	(37	44	33.28	-83	33	38.00	trib of Swift Camp Creek
6 (Sta 152+01.6, 86.6' left)	37	44	36.81	-83	33	4.98	Swift Camp Creek
7 (Sta 155+80, 65' left)	37	44	37.26	-83	32	59.83	Swift Camp Creek
8 (Sta 158+80, 65' left)	37	44	36.77	-83	32	56.63	Swift Camp Creek
9 (Sta 160+40, 65' left)	37	44	37.83	-83	32	54.90	Swift Camp Creek
10 (Sta 164+07.6, 118.4' left)	37	44	39.03	-83	32	50.20	trib of Swift Camp Creek
11 (Sta 8+00 Ramp W, 65' rt)	37	44	20.74	-83	33	44.15	trib of Swift Camp Creek
12 (Sta 9+50 Ramp W, 95' rt)	37	44	20.69	-83	33	43.44	trib of Swift Camp Creek
13 (Sta 174+19, 58.9' left)	37	44	40.34	-83	32	37.85	Campton Lake
14 (Sta 181+01.23, 83.4' left)	37	44	41.30	-83	32	29.48	Campton Lake
15 (Sta 181.30, 83.4' left)	37	44	41.34	-83	32	29.33	Campton Lake
16 (Sta 186+15, 116' left)	37	44	42.34	-83	32	22.88	Campton Lake
17 (Sta 196+03, 141.15' left)	37	44	44.74	-83	32	11.29	trib of Campton Lake
18 (Sta 204+72.3, 124.2' right)	37	44	44.87	-83	31	59.17	trib of Campton Lake
19 (Sta 209+88.4, 145.3' right)	37	44	41.69	-83	31	53.22	trib of Campton Lake
20 (Sta 238+20.68, 160' right)	37	44	40.94	-83	31	17.79	trib of Trace Fork
21 (Sta 243+04.1, 132' right)	37	44	39.85	-83	31	12.75	trib of Trace Fork
22 (Sta 246+61, 76' right)	37	44	40.14	-83	31	8.21	trib of Trace Fork
23 (Sta 258+00.85, 62' right)	37	44	36.21	-83	30	55.91	trib of Trace Fork
24 (Sta 265+33.3, 55.6' right)	37	44	34.50	-83	30	46.98	trib of Trace Fork
25 (Sta 269+78.65, 54' right)	37	44	32.80	-83	30	41.51	trib of Trace Fork
26 (Sta 275+06.75, 55' right)	37	44	31.21	-83	30	35.12	trib of Trace Fork
27 (Sta 278+53.9, 56' right)	37	44	30.44	-83	30	30.95	trib of Trace Fork

II. IMPROVEMENTS

A. Are you now required by any federal, state, or local authority to meet any implementaiton schedule for the construction, upgrading or operation of wastewater treatment equipment or practices or any other environmental programs which may affect the discharges described in this application? This includes, but is not limited to, permit conditions, administrative or enforcement orders, enforcement compliance schedule letters, stipulations, court orders, and grant or loan conditions.

1. Identification of Conditions, Agreements, Etc.	2. Affected Outfalls No.	Source of Discharge	3. Brief Description of Project	4. Final Compliance Date a. req.	b. proj.
N/A	N/A	N/A	N/A	N/A	N/A

B. You may attach additional sheets describing any additional water pollution (or other environmental projects which may affect your discharges) you now have under way or which you plan. Indicate whether each program is now under way or planned, and indicate your actual or planned schedules for construction.

III. SITE DRAINAGE MAP

Attach a site map showing topography (or indicating the outline of drainage areas served by the outfall(s) covered in the application if a topographic map is unavailable) depicting the facility including: each of its intake and discharge structures; the drainage area of each storm water outfall; paved areas and buildings within the drainage area of each storm water outfall, each know past or present areas used for outdoor storage or disposal of significant materials, each existing structural control measure to reduce pollutants in storm water runoff, materials loading and access areas, areas where pesticides, herbicides, soil conditioners and fertilizers are applied; each of its hazardous waste treatment, storage of disposal units (including each area not required to have a RCRA permit which is used for accumulating hazardous waste under 40 CFR 262.34); each well where fluids from the facility are injected underground; springs, and other surface water bodies which receive storm water discharges from the facility.

IV. NARRATIVE DESCRIPTION OF POLLUTANT SOURCES

A. For each outfall, provide an estimate of the area (include units) of impervious surfaces (including paved areas and building roofs) drained to the outfall, and an estimate of the total surface area drained by the outfall.

Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)	Outfall Number	Area of Impervious Surface (provide units)	Total Area Drained (provide units)
1	152,666 sq ft	237,648 sq ft	17	145,008 sq ft	1,886,722 sq ft
2	57,685 sq ft	678,712 sq ft	18	24,224 sq ft	428,732 sq ft
3	51,652 sq ft	321,666 sq ft	19	31,341 sq ft	155,688 sq ft
4	41,846 sq ft	347,417 sq ft	20	38,889 sq ft	2,872,890 sq ft
5	27,536 sq ft	605,072 sq ft	21	2,850 sq ft	691,684 sq ft
6	67,939 sq ft	264,534 sq ft	22	1,500 sq ft	390,434 sq ft
7	8,513 sq ft	16,999 sq ft	23	129,785 sq ft	9,655,226 sq ft
8	21,050 sq ft	55,403 sq ft	24	4,524 sq ft	493,624 sq ft
9	15,790 sq ft	52,423 sq ft	25	11,931 sq ft	254,988 sq ft
10	21,391 sq ft	314,001 sq ft	26	23,871 sq ft	257,324 sq ft
11	6, 861 sq ft	24,296 sq ft	27	21,060 sq ft	68,830 sq ft
12	935 sq ft	174,198 sq ft			
13	25,010 sq ft	331,199 sq ft			
14	21,502 sq ft	574,341 sq ft			
15	23,408 sq ft	32,501 sq ft			
16	35,290 sq ft	350,151 sq ft			

B. Provide a narrative description of significant materials that are currently or in the past three years have been treated, stored or disposed in a manner to allow exposure to storm water; method of treatment, storage, or disposal; past and present materials management practices employed to minimize contact by these materials with storm water runoff; materials loading and access areas; and the location, manner, and frequency in which pesticides, herbicides, soil conditioners, and fertilizers are applied.

During the construction of roadways and bridges, the main pollutant of concern is sediment associated with land disturbing activities. Typical pollutants associated with a roadway and bridge once they are in use include the following: 1) heavy metals from tire tread and brake linings 2) pH from road treatment operations during freezing weather 3) petrochemicals from auto leaks 4) TSS from dirt and debris that is transported by tires

The associated BMP Template and Supplemental Data discuss how these pollutants will be addressed.

C. For each outfall, provide the location and a description of existing structural and nonstructural control measures to reduce pollutants in storm water runoff; and a description of the treatment the storm water receives, including the schedule and type of maintenance for control and treatment measures and the ultimate disposal of any solid or fluid wastes other than by discharge.

Outfall Number	Treatment	List Codes from Table F-1

#1	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket	4-A
#2	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags	4-A
#3	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags	4-A
#4	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags	4-A
#5	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags	4-A
#6	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags	4-A
#7	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Water Quality Sediment Storage Area	4-A
#8	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Water Quality Sediment Storage Area	4-A
#9	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Water Quality Sediment Storage Area	4-A
#10	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags, Water Quality Sediment Storage Area	4-A
#11	Seed, Mulch, Rock Checks, Erosion Control Blanket	4-A
#12	Seed, Mulch, Rock Checks, Erosion Control Blanket	4-A
#13	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags, Water Quality Sediment Storage Area	4-A
#14	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags, Water Quality Sediment Storage Area	4-A
#15	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags	4-A
#16	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags, Water Quality Sediment Storage Area	4-A
#17	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags, Water Quality Sediment Storage Area	4-A
#18	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags, Water Quality Sediment Storage Area	4-A
#19	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags, Water Quality Sediment Storage Area	4-A
#20	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags	4-A
#21	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags	4-A
#22	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags	4-A
#23	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags	4-A
#24	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags	4-A
#25	Seed, Mulch, Rock Checks, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags	4-A
#26	Seed, Mulch, Rock Checks, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags	4-A
#27	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags	4-A

V. NON-STORM WATER DISCHARGES

A. I certify under penalty of law that the outfall(s) covered by this application have been tested or evaluated for the presence of non-storm water discharges, and that all non-storm water discharges from these outfall(s) are identified in either an accompanying Form C or Form SC application for the outfall.

Name and Official Title (type or print)	Signature	Date Signed

B. Provide a description of the method used, the date of any testing, and the onsite drainage points that were directly observed during a test.

N/A

VI. SIGNIFICANT LEAKS OR SPILLS

Provide existing information regarding the history of significant leaks or spills of toxic or hazardous pollutants at the facility in the last three years, including the approximate date and location of the spill or leak, and the type and amount of material released.

N/A Construction project

VII. DISCHARGE INFORMATION

A,B,C, & D: See instructions before proceeding. Complete one set of tables for each outfall. Annotate the outfall number in the space provided. Tables F-1, F-2, and F-3 are included on separate pages.

E: Potential discharges not covered by analysis - is any toxic pollutant listed in Table F-2, F-3, or F-4, a substance which you currently use or manufacture as an intermediate or final product or by product.

☐ Yes (list all such pollutants below) ☒ No (go to Section IX)

N/A Construction project

VIII. BIOLOGICAL TOXICITY TESTING DATA

Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made on any of your discharges or on a receiving water in relation to your discharge within the last 3 years?

☐ Yes (list all such results below) ☒ No (go to Section IX)

N/A Construction project

IX. CONTRACT ANALYSIS INFORMATION

Were any of the analyses reported in item VII performed by a contract laboratory or consulting firm?

☐ Yes (list the name, address and telephone number of, and pollutants analyzed by each such laboratory or firm below; use additional sheets if necessary).

☒ No (go to Section IX)

A. Name	B. Address	C. Area Code & Phone No.	D. Pollutants Analyzed
N/A	N/A	N/A	N/A

X. CERTIFICATION

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

NAME & OFFICIAL TITLE (type or print)	AREA CODE AND PHONE NO.
Mr. ☒ Ms. ☐ CHRIS KELLER V.P.	859-987-3670
SIGNATURE	**DATE SIGNED**
Chris Keller V.P.	12-07-09

VII. DISCHARGE INFORMATION			OUTFALL NO:			

Part A - **You must provide the results of at least one analysis for every pollutant in this table.** Complete one table for each outfall. See instructions for additional details.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1st 20 Minutes	Flow-weighted Composite		
Oil and Grease		N/A				
Biological Oxygen Demand BOD_5						
Chemical Oxygen Demand (COD)						
Total Suspended Solids (TSS)						
Total Kjeldahl Nitrogen						
Nitrate plus Nitrite Nitrogen						
Total Phosphorus						
pH	Minimum	Maximum	Minimum	Maximum		

Part B - List each pollutant that is limited in an effluent guideline which the facility is subject to or any pollutant listed in the facility's KPDES permit for its process wastewater (if the facility is operating under an existing KPDES permit). Complete one table for each outfall. See the instructions for additional details and requirements.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1st 20 Minutes	Flow-weighted Composite		

Part C - List each pollutant shown in Tables F-2, F-3, and F-4 that you know or have reason to believe is present. See the instructions for additional details and requirements. Complete one table for each outfall.

Pollutant and CAS Number (if available)	Maximum Values (include units)		Average Values (include units)		Number of Storm Events Sampled	Sources of Pollutants
	Grab Sample Taken During 1st 20 Minutes	Flow-weighted Composite	Grab Sample Taken During 1st 20 Minutes	Flow-weighted Composite		

Part D - Provide data for the storm event(s) which resulted in the maximum values for the flow-weighted composite sample.

1. Date of Storm Event	2. Duration of Storm Event (in minutes)	3. Total rainfall during storm event (in inches)	4. Number of hours between beginning of storm measured and end of previous measurable rain event	5. Maximum flow rate during rain event (gal/min or specify units)	6. Total flow from rain event (gallons or specify units)

7. Provide a description of the method of flow measurement or estimate.

KPDES Individual Permit Supplemental Data

Kentucky Transportation Cabinet

Highway District 10

And

Hinkle Contracting Corporation

For

KY 9000/KY 9009 and KY 15 S
Mountain Parkway

Contract ID 079051

November 10, 2009

Table of Contents

1.0 Project Background

The Kentucky Transportation Cabinet (KYTC) is widening the Mountain Parkway from two lanes to four lanes and reconstructing the Mountain Parkway interchange with KY 15. This project includes grading, drainage, surfacing, two bridges, and a median barrier wall in Wolfe County, Kentucky. The project site is located within KYTC District 10 near the city of Campton.

Construction of the project began on June 1, 2008, and is scheduled to be completed by June 15, 2012. Construction is presently being done under the authority of a KYR10 permit issued September 30, 2007, and expiring on August 1, 2010.

Swift Camp Creek and its tributaries are classified as "special use waters" by the Kentucky Division of Water, and more specifically as "cold water aquatic habitat", as shown in 401 KAR 5:030 Section 3(2). Cold water aquatic habitats are surface waters and associated substrate that will support indigenous aquatic life or self-sustaining or reproducing trout populations on a year-round basis. Due to this classification special, considerations during design, construction, and post-construction have and will be observed. These considerations include but, are not limited to use of enhanced Best Management Practices (BMPs) during construction, and installation of enhanced BMPs for post-construction.

2.0 Environmental Considerations

This section describes the activities that KYTC and Hinkle Contracting Corporation has implemented to address environmental concerns.

2.1 SPECIAL CONSIDERATIONS

2.1.1 Environmentally Sensitive Features

The environmentally sensitive feature for this project includes Swift Camp Creek and its tributaries, an "cold water aquatic habitat".

2.1.2 Pollutants of Concern

The main pollutant of concern for this project is sediment. Swift Camp Creek already contains significant sediment due to eroding banks and upstream watershed activity. During the construction of this project BMPs will be implemented to minimize sediment from the construction site. In addition, river bank stabilization will be implemented to reduce streambank erosion.

2.1.3 Threatened and Endangered Species

There are no aquatic threatened and/or endangered species in close proximity to the project.

The KYTC DEA received a letter from the U.S. Fish and Wildlife Service stating that they concur with the Biological Assessment determination that the project is "not likely to adversely affect" the federally listed Indiana bat, gray bat, Virginia big-eared bat, and white-haired goldenrod. The letter also stated that the requirements of section 7 of the Act have been fulfilled.

2.2 EROSION PREVENTION AND SEDIMENT CONTROL (EPSC) SWPPP

The following site specific EPSC BMPs have been developed specifically for this project. These BMPs are over and above the standard EPSC BMPs, as indicated in the table below.

Area to be Treated	Standard BMP	Enhanced/Site Specific BMP
Outfall #1 – Drainage channel north of the new road	Seed, Mulch, Rock Checks, Erosion Control Blanket	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket
Outfall #2 – Drainage inlet south of new road	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags
Outfall #3 – Drainage inlet/outlet crossing new road	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags
Outfall #4 – Drainage inlet south of new road	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags
Outfall #5 – Drainage inlet south of new road	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags
Outfall #6 – Drainage	Seed, Mulch, Rock Checks,	Seed, Mulch, Rock Checks,

inlet/outlet crossing new road	Rock Lined Channel	Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags
Outfall #7 – Drainage channel north of the new road	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Water Quality Sediment Storage Area
Outfall #8 – Drainage channel south of the new road	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Water Quality Sediment Storage Area
Outfall #9 – Drainage channel south of the new road	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Water Quality Sediment Storage Area
Outfall #10 – Drainage inlet/outlet crossing new road	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags, Water Quality Sediment Storage Area
Outfall #11 – Drainage channel northeast of Ramp W	Seed, Mulch, Rock Checks	Seed, Mulch, Rock Checks, Erosion Control Blanket
Outfall #12 – Drainage channel northeast of Ramp W	Seed, Mulch, Rock Checks	Seed, Mulch, Rock Checks, Erosion Control Blanket
Outfall #13 – Drainage inlet/outlet crossing new road	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags, Water Quality Sediment Storage Area
Outfall #14 – Drainage inlet south of new road	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags, Water Quality

		Sediment Storage Area
Outfall #15 – Drainage channel north of the new road	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags
Outfall #16 – Drainage inlet/outlet and channel	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags, Water Quality Sediment Storage Area
Outfall #17 – Drainage inlet/outlet and channel	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags, Water Quality Sediment Storage Area
Outfall #18 – Drainage inlet/outlet and channel	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags, Water Quality Sediment Storage Area
Outfall #19 – Drainage inlet/outlet and channel	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags, Water Quality Sediment Storage Area
Outfall #20 – Drainage inlet/outlet and channel	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags
Outfall #21 – Drainage inlet/outlet and channel	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion

		Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags
Outfall #22 – Drainage inlet/outlet and channel	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags
Outfall #23 – Drainage inlet and channel	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags
Outfall #24 – Drainage inlet/outlet and channel	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags
Outfall #25 – Drainage inlet and channel	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags
Outfall #26 – Drainage inlet and channel	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags
Outfall #27 – Drainage inlet/outlet and channel	Seed, Mulch, Rock Checks, Rock Lined Channel	Seed, Mulch, Rock Checks, Rock Lined Channel, Erosion Control Blanket, Modified Silt Trap TY A w/ Perf Pipe and Rock Bags

2.2.1 Design Storms

EPSC BMPs will be designed to properly function at a 2-year/24-hour design storm.

2.2.2 Enhanced/Site Specific BMPs

The following enhanced/site specific EPSC BMPs will be utilized on this project. These BMPs include both structural and non-structural measures. All BMPs are in accordance with Sections 212 (Erosion Control) and 213 (Water Pollution Control) of KYTC's 2008 Standard Specifications.

Structural

- Water Quality Sediment Storage Areas: designed hydraulically for a 2-year/24-hour storm. These structures will be constructed within the project in areas draining towards waters with cold water habitats.
- Modified Silt Trap Type A with perforated pipe and rock silt bags placed at the inlet headwall of all pipe carrying water off of the project. This structure is constructed by placing gravel bags covering the headwall inlet with 3-5 feet of 8-inch perforated pipe sticking straight up from behind the rock bags with the perforated pipe approximately 3 feet above the headwall. A modified Type A Silt Trap (with #2 stone around the headwall) is then constructed.
- Place rock behind silt fence in high flow areas.
- Plant trees along banks of Swift Camp Creek where existing trees were removed to assist in bank stabilization and provide shade cover for cold water habitat.

Non-structural

- Appropriate stock of straw Erosion Control Blanket shall be available onsite at all times.
- Erosion Control Blanket will be applied within 24 hours of the cessation of the land disturbing activity.
- Sediment Control BMP's will be maintained when the sediment reaches 1/3 the depth of the BMP vs 1/2 the depth.

3.0 Antidegradation

3.1 PUBLIC NOTICE

The Kentucky Division of Water will publish the draft permit for public notice and allow a public comment period of at least thirty (30) days. The notice shall be published in a daily or weekly newspaper within the area affected by the activity.

3.2 ALTERNATIVES EVALUATION

The purpose of the project is to begin fulfilling the long range plan of widening the Mountain Parkway from KY 15S to Prestonsburg. The project will also correct the structural deficiencies of the Swift Camp Creek Bridge which will require a road closure to reconstruct the bridge without the widening project. The project will also facilitate safe and efficient movement of people and goods along this section of the parkway by 1) providing an eastbound ramp from Ky 15S onto

the eastbound Mountain Parkway, 2) separating opposing traffic with a median barrier, 3) providing a safer movement for the westbound ramp from Ky 15S to westbound Mountain Parkway and 4) widening the parkway to provide capacity for the future roadway system. The project will also provide additional storm water runoff protection for the City of Campton water supply.

3.3 POST-CONSTRUCTION STORMWATER POLLUTION PREVENTION PLAN

Post-construction BMPs are designed to provide long-term stormwater management to efficiently and effectively treat stormwater runoff from project sites. Post-construction BMPs treat stormwater runoff and reduce peak flows to pre-project conditions or lower. Typically, post-construction BMPs are designed to manage the first flush of runoff, meaning that it will treat the initial concentration of contaminated runoff. The pollutant concentration in the first flush is typically greater than subsequent runoff volumes in the same wet weather event. Post-construction BMPs may be designed per water quality and/or water quantity requirements.

3.3.1 Post-construction SWPPP

The following post-construction BMPs are proposed to be used on the project:

- Water Quality Sediment Storage Area: At all locations on the project where water will be discharged into "Special Waters of the Commonwealth" a "Water Quality Sediment Storage Area" structure will be constructed with associated rock lined channels and erosion control blanket to control the sediment and keep it within the project limits.

- Tree planting along Swift Camp Creek: Due to the removal of some trees along Swift Camp Creek around the Swift Camp Creek bridge several trees will be planted along Swift Camp Creek for bank stabilization and shade for the creeks' cold water habitat

- Erosion Control Blanket: ECB will be placed around the outer edge of the rock lined channels which are discharging water outside of the project limits.

These BMPs are over and above the standard post-construction BMPs, as indicated in the table below.

Area to be Treated	Standard BMP	Enhanced/Site Specific BMP
Outfall #1 – Drainage channel north of the new road	Erosion Control Blanket	Erosion Control Blanket, Rock Lined Channel
Outfall #2 – Drainage inlet south of new road	Rock Lined Channel	Erosion Control Blanket, Rock Lined Channel
Outfall #3 – Drainage	Rock Lined Channel	Erosion Control Blanket, Rock Lined Channel

inlet/outlet crossing new road		
Outfall #4 – Drainage inlet south of new road	Rock Lined Channel	Erosion Control Blanket, Rock Lined Channel
Outfall #5 – Drainage inlet south of new road	Rock Lined Channel	Erosion Control Blanket, Rock Lined Channel
Outfall #6 – Drainage inlet/outlet crossing new road	Rock Lined Channel	Erosion Control Blanket, Rock Lined Channel
Outfall #7 – Drainage channel north of the new road	Rock Lined Channel	Erosion Control Blanket, Rock Lined Channel, Water Quality Sediment Storage Area
Outfall #8 – Drainage channel south of the new road	Rock Lined Channel	Erosion Control Blanket, Rock Lined Channel, Water Quality Sediment Storage Area
Outfall #9 – Drainage channel south of the new road	Rock Lined Channel	Erosion Control Blanket, Rock Lined Channel, Water Quality Sediment Storage Area
Outfall #10 – Drainage inlet/outlet crossing new road	Rock Lined Channel	Erosion Control Blanket, Rock Lined Channel, Water Quality Sediment Storage Area
Outfall #11 – Drainage channel northeast of Ramp W	Seeding	Seeding, Erosion Control Blanket
Outfall #12 – Drainage channel northeast of Ramp W	Seeding	Seeding, Erosion Control Blanket
Outfall #13 – Drainage inlet/outlet crossing new road	Rock Lined Channel	Erosion Control Blanket, Rock Lined Channel, Water Quality Sediment Storage Area
Outfall #14 – Drainage inlet south of new road	Rock Lined Channel	Erosion Control Blanket, Rock Lined Channel, Water Quality Sediment Storage Area
Outfall #15 – Drainage channel north of the new road	Rock Lined Channel	Rock Lined Channel, Erosion Control Blanket
Outfall #16 – Drainage inlet/outlet and channel	Rock Lined Channel	Erosion Control Blanket, Rock Lined Channel, Water Quality Sediment Storage Area
Outfall #17 – Drainage inlet/outlet and channel	Rock Lined Channel	Erosion Control Blanket, Rock Lined Channel, Water Quality Sediment Storage Area
Outfall #18 – Drainage	Rock Lined Channel	Erosion Control Blanket, Rock

inlet/outlet and channel		Lined Channel, Water Quality Sediment Storage Area
Outfall #19 – Drainage inlet/outlet and channel	Rock Lined Channel	Erosion Control Blanket, Rock Lined Channel, Water Quality Sediment Storage Area
Outfall #20 – Drainage inlet/outlet and channel	Rock Lined Channel	Rock Lined Channel, Erosion Control Blanket
Outfall #21 – Drainage inlet/outlet and channel	Rock Lined Channel	Rock Lined Channel, Erosion Control Blanket
Outfall #22 – Drainage inlet/outlet and channel	Rock Lined Channel	Rock Lined Channel, Erosion Control Blanket
Outfall #23 – Drainage inlet and channel	Rock Lined Channel	Rock Lined Channel, Erosion Control Blanket
Outfall #24 – Drainage inlet/outlet and channel	Rock Lined Channel	Rock Lined Channel, Erosion Control Blanket
Outfall #25 – Drainage inlet and channel	Rock Lined Channel	Rock Lined Channel, Erosion Control Blanket
Outfall #26 – Drainage inlet and channel	Rock Lined Channel	Rock Lined Channel, Erosion Control Blanket
Outfall #27 – Drainage inlet/outlet and channel	Rock Lined Channel	Rock Lined Channel, Erosion Control Blanket

3.3.2 Effort to Minimize Discharges

During the design of this project, consideration was given to reducing the number of discharge locations; however, topography and right-of-way boundaries limited any further reduction. In addition, consideration was given to reducing the amount of concentrated flow or providing sheet flow instead of concentrated flow. Infiltration type BMPs were not utilized due to the tight constraints of the site and concerns with stability of the road embankments. Sheet flow was utilized in all areas where the gradient sloped away from the project to the nearest drainage way.

3.3.3 Evaluation of Alternative Discharge Locations

The project was evaluated for alternative discharge locations. Due to the topography of the site there were no viable alternatives.

3.3.4 Alternative Post-Construction BMPs

Various post-construction BMPs were considered for this project. The ones selected were chosen because of the soil type, the available area, the topography and the amount of flow to manage.

3.4 ASSESMENT OF JUSTIFIABLE RISK

This project will correct the structural deficiencies of the Swift Camp Creek Bridge which will require a road closure to reconstruct the bridge without the widening project. The project will also facilitate safe and efficient movement of people and goods along this section of the parkway. The project will also provide additional storm water runoff protection for the City of Campton water supply.

Kentucky Transportation Cabinet

Highway District 10

And

Hinkle Contracting Corporation

Kentucky Pollutant Discharge Elimination System
Permit KYR10
Enhanced Best Management Practices (BMP) plan

Groundwater protection plan

For Highway Construction Activities

For

KY 9000/KY 9009 and KY 15 S
Mountain Parkway

Contract ID 079051

Revised
11-30-09

Project Information

Note – (1) = Design (2) = Construction (3) = Contractor

1. Owner – Kentucky Transportation Cabinet, District 10
2. Resident Engineer: Steve Gunnell
3. Contractor Name: Hinkle Contracting Corporation
   Address: 605 Blue Sky Parkway
   Phone number: 859-263-7558
   Contact: Chad Conley
   Responsible Person: Chad Conley
4. Contract ID Number: 079051
5. Route (Address): Mountain Parkway
6. Latitude/Longitude (project mid-point): 37 degrees 44 minutes North
   83 degrees 33 minutes West
7. County (project mid-point): Wolfe County
8. Project start date (date work will begin): June 1, 2008
9. Projected completion date: June 15, 2012

1.0 SITE DESCRIPTION.

1) Nature of construction activity: Widen the Mountain Parkway from two lanes to four lanes and reconstruct the Mountain Parkway interchange with KY 15. This project includes grading, drainage, surfacing, two bridges, and a median barrier wall.
2) Order of major soil disturbing activities.
    1. Station 71+50 to Station 157+00
    2. Station 157+00 to Station 220+00
    3. Station 220+00 to Station 286+00
3) Projected volume of material to be moved: 770,000 CY
4) Estimate of total project area (acres): 174 acres
5) Estimate of area to be disturbed (acres): 174 acres
6) Post construction runoff coefficient will be included in the project drainage folder. Persons needing information pertaining to the runoff coefficient will contact the resident engineer to request this information.
7) Data describing existing soil condition: Earth material disturbed is expected to consist of soil, shale, and sandstone.
8) Data describing existing discharge water quality (if any): None.
9) Receiving water name(s): Swift Camp Creek and Trace Fork
10) TMDLs and Pollutants of Concern in Receiving Waters: Sediment
11) Site Map. Project layout sheet plus the erosion control sheets in the project plans that depict Disturbed Drainage Areas (DDAs) and related information. These sheets depict the existing project conditions with areas delineated by DDA (drainage area bounded by watershed breaks and right of way limits), the storm water discharge locations (either as a point discharge or as overland flow) and the areas that drain to each discharge point. These plans define the limits of areas to be disturbed and the location of control measures. Controls will be either site specific as designated by the designer or will be annotated by the contractor and resident engineer before disturbance commences. The project layout sheet shows the surface waters and wetlands.
12) Potential sources of pollutants. The primary source of pollutants is solids that are mobilized during storm events. Other sources of pollutants include oil/fuel/grease from servicing and operating construction equipment, concrete washout water, sanitary wastes and trash/debris.

2.0 SEDIMENT AND EROSION CONTROL MEASURES.

2.1 Erosion Control Sheets. Plans for highway construction projects will include erosion control sheets that depict Disturbed Drainage Areas (DDAs) and related information. These plan sheets will show the existing project conditions with areas delineated by DDA within the right of way limits, the discharge points and the areas that drain to each discharge point. Project managers and designers will analyze the DDAs and identify Best Management Practices (BMPs) that are site specific. The balance of the BMPs for the project will be listed in the bid

documents for selection and use by the contractor on the project with approval by the resident engineer.

Projects that do not have DDAs annotated on the erosion control sheets will employ the same concepts for development and managing BMP plans.

2.2 Annotations. Following award of the contract, the contractor and resident engineer will annotate the erosion control sheets showing location and type of BMPs for each of the DDAs that will be disturbed at the outset of the project. This annotation will be accompanied by an order of work that reflects the order or sequence of major soil moving activities. The remaining DDAs are to be designated as "Do Not Disturb" until the contractor and resident engineer prepare the plan for BMPs to be employed. The initial BMPs shall be for the first phase (generally Clearing and Grubbing) and shall be modified as needed as the project changes phases. The BMP Plan will be modified to reflect disturbance in additional DDA's as the work progresses. All DDA's will have adequate BMPs in place before being disturbed.

2.3 Disturbed Drainage Areas. As DDAs are prepared for construction, the following will be addressed for the project as a whole or for each DDA as appropriate:

A) **Construction Access.** This is the first land-disturbing activity. As soon as construction begins, bare areas will be stabilized with gravel and temporary mulch and/or vegetation.

B) **Sources.** At the beginning of the project, all DDAs for the project will be inspected for areas that are a source of storm water pollutants. Areas that are a source of pollutants will receive appropriate cover or BMPs to arrest the introduction of pollutants into storm water. Areas that have not been opened by the contractor will be inspected periodically (once per month) to determine if there is a need to employ BMPs to keep pollutants from entering storm water.

C) **Clearing and Grubbing.** The following BMPs will be considered and used where appropriate.

1) Leaving areas undisturbed when possible.
2) Silt Basins to provide silt volume for large areas.
3) Silt Traps Type A for small areas.
4) Silt Traps Type C in front of existing and drop inlets which are to be saved.
5) Diversion ditches to catch sheet runoff and carry it to basins or traps or to divert it around areas to be disturbed.
6) Brush and/or other barriers to slow and/or divert runoff.
7) Silt fences to catch sheet runoff on short slopes. For longer slopes, multiple rows of silt fence may be considered.
8) Temporary Mulch for areas which are not feasible for the fore mentioned types of protections.
9) Modified Silt Traps Type A with perforated pipe and rock bags at inlet headwalls.
10) Other Non-standard or innovative methods.

D) Cut and Fill and Placement of Drainage Structures. The BMP Plan will be modified to show additional BMPs such as:

1) Silt Traps Type B in ditches and/or drainways as they are completed.
2) Silt Traps Type C in front of pipes after they are placed.
3) Channel Lining
4) Erosion Control Blanket
5) Temporary Mulch and/or seeding for areas where construction activities will be ceased for 14 days or more.
6) Non-standard or innovative methods.

E) Profile and X-Section in Place. The BMP Plan will be modified to show elimination of BMPs which had to be removed and the addition of new BMPs as the roadway was shaped. Probably changes include:

1) Silt Trap Type A, Brush and/or other barriers, Temporary Mulch, and any other BMP which had to be removed for final grading to take place.
2) Additional Silt Traps Type B and Type C to be placed as final drainage patterns are put in place.
3) Additional Channel Lining and/or Erosion Control Blanket.
4) Temporary Mulch for areas where Permanent Seeding and Protection cannot be done within 14 days.
5) Special BMPs such as Karst Policy.

F) Finish Work (Paving, Seeding, Protect, etc.). A final BMP Plan will result from modifications during this phase of construction. Probable changes include:

1) Removal of Silt Traps Type B from ditches and drainways if they are protected with other BMPs which are sufficient to control erosion, i.e. Erosion Control Blanket or Permanent Seeding and Protection on moderate grades.
2) Permanent Seeding and Protection.
3) Placing Sod.
4) Planting trees and/or shrubs where they are included in the project.
5) Planting trees on the banks of Swift Camp Creek to provide bank stabilization and shade cover for the cold water aquatic habitat.
6) Placing erosion control blanket around rock lined channels located near project discharge points.

G) Post Construction. BMPs including Storm Water Management Devices such as velocity dissipation devices and Karst policy BMPs to be installed during construction to control the pollutants in storm water discharges that will occur after construction has been completed are:

Karst policy features (Water Quality Sediment Storage Areas) used to protect Campton Lake and Swift Camp Creek from runoff coming from the Mountain Parkway road surface.

H) Enhanced BMP. Enhanced items listed in this BMP plan include:

During Construction:

1) Install modified Type A Silt Traps with 8" perforated pipe and rock silt bags at all inlet headwalls directing water off of the project. These structures will control sediment from large areas.
2) Stone will be placed behind silt fence in sections receiving high water flows.
3) Sediment will be removed from sediment basins when the basin has reached 33% of its capacity.
4) Place Erosion Control Blanket around rock lined channels located near project discharge points.
5) Appropriate stock of Erosion Control Blanket shall be available on-site at all times.

Post Construction:

6) Planting trees along the banks of Swift Camp Creek to provide bank stabilization and shade for the cold water aquatic habitat.
7) Water Quality Sediment Storage Area structures to be constructed with the project in areas draining toward Swift Camp Creek and Campton Lake.
8) After evaluating the Through Deck Drains on the Swift Camp Creek bridge it was decided that the four drains between piers 2 and 3 were draining too close to Swift Camp Creek. Due to the fact that Swift Camp Creek is a cold water aquatic habitat two of these drains will be deleted and the other two will be relocated further from the creek in order to be able to capture this runoff and divert it into a sediment trap type A, which will be a permenant structure.

3.0 OTHER CONTROL MEASURES.

1) Solid Materials. No solid materials, including building materials, shall be discharged to waters of the commonwealth, except as authorized by a Section 404 permit.
2) Waste Materials. All waste materials that may leach pollutants (paint and paint containers, caulk tubes, oil/grease containers, liquids of any kind, soluble materials, etc.) will be collected and stored in appropriate covered waste containers. Waste containers shall be removed from the project site on a sufficiently frequent basis as to not allow wastes to become a source of pollution. All personnel will be instructed regarding the correct procedure for waste disposal. Wastes will be disposed in accordance with appropriate regulations. Notices stating these practices will be posted in the office.
3) Hazardous Waste. All hazardous waste materials will be managed and disposed of in the manner specified by local or state regulation. The contractor shall notify the Resident Engineer if there are any hazardous wastes being generated at the project site and how these wastes are being managed. Site personnel will be instructed with regard to proper storage and handling of hazardous wastes when required. The Transportation Cabinet will file for generator, registration when appropriate, with the Division of Waste Management and advise the contractor regarding waste management requirements.
4) Spill Prevention. The following material management practices will be used to reduce the risk of spills or other exposure of materials and substances to the weather and/or runoff.
5) Appropriate stock of straw Erosion Control Blanket shall be available on-site at all times.
6) Erosion Control Blanket will be applied within 24 hours of the cessation of the land disturbing activity.

2.4 Good Housekeeping. The following good housekeeping practices will be followed onsite during the construction project.

1) An effort will be made to store only enough product required to do the job.
2) All materials stored onsite will be stored in a neat, orderly manner in their appropriate containers and, if possible, under a roof or other enclosure.
3) Products will be kept in their original containers with the original manufacturer's label.
4) Substances will not be mixed with one another unless recommended by the manufacturer.
5) Whenever possible, all of the product will be used up before disposing of the container.
6) Manufacturers' recommendations for proper use and disposal will be followed
7) The site contractor will inspect daily to ensure proper use and disposal of materials onsite.

2.5 Hazardous Products. These practices will be used to reduce the risks associated with any and all hazardous materials.

1) Products will be kept in original containers unless they are not re-sealable.
2) Original labels and material safety data sheets (MSDS) will be reviewed and retained
3) Contractor will follow procedures recommended by the manufacturer when handling hazardous materials.
4) If surplus product must be disposed of, manufacturers' or state/local recommended methods for proper disposal will be followed.

2.6 The following product-specific practices will be followed onsite:

A) **Petroleum Products.** Vehicles and equipment that are fueled and maintained on site will be monitored for leaks, and receive regular preventative maintenance to reduce the chance of leakage. Petroleum products onsite will be stored in tightly sealed containers, which are clearly labeled and will be protected from exposure to weather.

The contractor shall prepare an Oil Pollution Spill Prevention Control and Countermeasure plan when the project that involves the storage of petroleum products in 55 gallon or larger containers with a total combined storage capacity of 1,320 gallons. This is a requirement of 40 CFR 112.

This project will have over 1,320 gallons of petroleum products with a total capacity, sum of all containers 55 gallon capacity and larger.

B) **Fertilizers.** Fertilizers will be applied at rates prescribed by the contract, standard specifications or as directed by the resident engineer. Once applied, fertilizer will be covered with mulch or blankets or worked into the soil to limit exposure to storm water. Storage will be in a covered shed. The contents of any partially used bags of fertilizer will be transferred to a sealable plastic bin to avoid spills.

C) **Paints.** All containers will be tightly sealed and stored indoors or under roof when not being used. Excess paint or paint wash water will not be discharged to the drainage or storm sewer system but will be properly disposed of according to manufacturers' instructions or state and local regulations.

D) **Concrete Truck Washout.** Concrete truck mixers and chutes will not be washed on pavement, near storm drain inlets, or within 75 feet of any ditch, stream, wetland, lake, or sinkhole. Where possible, excess concrete and wash water will be discharged to areas prepared for pouring new concrete, flat areas to be paved that are away from ditches or drainage system features, or other locations that will not drain off site. Where this approach is not possible, a shallow earthen wash basin will be excavated away from ditches to receive the wash water

E) **Spill Control Practices.** In addition to the good housekeeping and material management practices discussed in the previous sections of this plan, the following practices will be followed for spill prevention and cleanup:

1) Manufacturers' recommended methods for spill cleanup will be clearly posted. All personnel will be made aware of procedures and the location of the information and cleanup supplies.
2) Materials and equipment necessary for spill cleanup will be kept in the material storage area. Equipment and materials will include as appropriate, brooms, dust

pans, mops, rags, gloves, oil absorbents, sand, sawdust, and plastic and metal trash containers.

3) All spills will be cleaned up immediately after discovery.
4) The spill area will be kept well ventilated and personnel will wear appropriate protective clothing to prevent injury from contract with a hazardous substance.
5) Spills of toxic or hazardous material will be reported to the appropriate state/local agency as required by KRS 224 and applicable federal law.
6) The spill prevention plan will be adjusted as needed to prevent spills from reoccurring and improve spill response and cleanup.
7) Spills of products will be cleaned up promptly. Wastes from spill clean up will be disposed in accordance with appropriate regulations.

4.0 OTHER STATE AND LOCAL PLANS. This BMP plan shall include any requirements specified in sediment and erosion control plans, storm water management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in this BMP plan). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials.

5.0 MAINTENANCE. The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.

Maintenance of BMPs during construction shall be a result of weekly and post rain event inspections with action being taken by the contractor to correct deficiencies.

Post Construction maintenance will be a function of normal highway maintenance operations. Following final project acceptance by the cabinet, district highway crews will be responsible for identification and correction of deficiencies regarding ground cover and cleaning of storm water BMPs. The project manager shall identify any BMPs that will be for the purpose of post construction storm water management with specific guidance for any non-routine maintenance.

6.0 INSPECTIONS. Inspection and maintenance practices that will be used to maintain erosion and sediment controls:

1) All erosion prevention and sediment control measures will be inspected by the contractor at least once each week and following any rain event.
2) Inspections will be conducted by individuals that have received KYTC Grade Level II training or other qualification as prescribed by the cabinet that includes instruction concerning sediment and erosion control.
3) Inspection reports will be written, signed, dated, and kept on file.
4) Areas at final grade will be seeded and mulched within 7 days.
5) Stockpiles and areas that are not at final grade, but that will be undisturbed for a period of 21 days or longer shall receive temporary mulch no later than 7 days from the last construction activity in that area.

6) All measures will be maintained in good working order; if a repair is necessary, it will be initiated within 24 hours of being reported and completed within 5 days.
7) Built-up sediment will be removed from behind the silt fence before it has reached halfway up the height of the fence.
8) Stone will be placed behind silt fence in areas of the silt fence that receive high water flows.
9) Silt fences will be inspected for bypassing, overtopping, undercutting, depth of sediment, tears, and to ensure attachment to secure posts.
10) Sediment basins will be inspected for depth of sediment, and built-up sediment will be removed when it reaches 33 percent of the design capacity and at the end of the job.
11) Diversion dikes and berms will be inspected and any breaches promptly repaired. Areas that are eroding or scouring will be repaired and re-seeded / mulched as needed.
12) Temporary and permanent seeding and mulching will be inspected for bare spots, washouts, and healthy growth. Bare or eroded areas will be repaired as needed.
13) All material storage and equipment servicing areas that involve the management of bulk liquids, fuels, and bulk solids will be inspected weekly for conditions that represent a release or possible release of pollutants to the environment.
14) Special consideration will be given to the controls at the Swift Camp Creek temporary crossings. This special consideration is needed because data on 5 year storm events indicate that flood waters rise above the Swift Camp Creek Road level. If sediment has not been cleaned from these controls prior to a storm event of this size, flood waters could mobilize the sediment from the controls and carry it down stream. If the National Weather Service or local media are forecasting a storm event, these controls will be inspected by the project superintendent prior to the event and if sediment is present it will be removed.

7.0 NON-STORM WATER DISCHARGES. It is expected that non-storm water discharges may occur from the site during the construction period. Examples of non-storm water discharges include:

1) Water from water line flushings.
2) Water form cleaning concrete trucks and equipment.
3) Pavement wash waters (where no spills or leaks of toxic or hazardous materials have occurred).
4) Uncontaminated groundwater and rain water (from dewatering during excavation).

All non-storm water discharges will be directed to the sediment basin or to a filter fence enclosure in a flat vegetated infiltration area or be filtered via another approved commercial product.

8.0 GROUNDWATER PROTECTION PLAN.

This plan serves as the groundwater protection plan as required by 401 KAR 5:037.

The following activities, as enumerated by 401 KAR 5:037 Section 2. (2) requiring the preparation and implementation of a groundwater protection plan, will or may be may be conducted as part of this construction project:

_____ (e) Land treatment or land disposal of a pollutant;

_____ (f) Storing, treating, disposing, or related handling of hazardous waste, solid waste or special waste, or special waste in landfills, incinerators, surface impoundments, tanks, drums, or other containers, or in piles, (This does not include wastes managed in a container placed for collection and removal of municipal solid waste for disposal off site);

__x__ (g) Handling of materials in bulk quantities (equal or greater than 55 gallons or 100 pounds net dry weight transported held in an individual container) that, if released to the environment, would be a pollutant;

_____ (j) Storing or related handling of road oils, dust suppressants, or deicing agents at a central location;

__x__ (k) Application or related handling of road oils, dust suppressants or deicing materials, (does not include use of chloride-based deicing materials applied to roads or parking lots);

_____ (m) Installation, construction, operation, or abandonment of wells, bore holes, or core holes, (this does not include bore holes for the purpose of explosive demolition);

Or, check the following only if there are no qualifying activities

_____ There are no activities for this project as listed in 401 KAR 5:037 Section 2 that require the preparation and implementation of a groundwater protection plan.

The contractor is responsible for the preparation of a plan that addresses the 401 KAR 5:037 Section 3. Elements of site specific groundwater protection plan:

(a) General information about this project is covered in the Project information;
(b) Activities that require a groundwater protection plan have been identified above;
(c) Practices that will protect groundwater from pollution are addressed in section C. Other control measures.
(d) Implementation schedule – all practices required to prevent pollution of groundwater are to be in place prior to conducting the activity;
(e) Training is required as a part of the ground water protection plan. All employees of the contractor, sub-contractor and resident engineer personnel will be trained to understand the nature and requirements of this plan as they pertain to their job function(s). Training will be accomplished within one week of employment and annually thereafter. A record of training will be maintained by the contractor with a copy provide to the resident engineer.
(f) Areas of the project and groundwater plan activities will be inspected as part of the weekly sediment and erosion control inspections

(g) Certification (see signature page.)

Contractor and Resident Engineer Plan Certification

The contractor that is responsible for implementing this BMP plan is identified in the Project Information section of this plan.

The following certification applies to all parties that are signatory to this BMP plan:

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. Further, this plan complies with the requirements of 401 KAR 5:037. By this certification, the undersigned state that the individuals signing the plan have reviewed the terms of the plan and will implement its provisions as they pertain to ground water protection.

Contractor and Resident Engineer Certification:

(3)
Signed CHRIS KELLER title V.P. , V.P.
typed or printed name[1] *signature*

(2)
Signed STEVEN GUNNELL title T.E. SUPERVISOR ,
typed or printed name[2] *signature*

1. *Contractors Note: to be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601. Reference the Contract ID number and KPDES number when one has been issued.*

2. *KYTC Note: to be signed by the Chief District Engineer or a person designated to have the authority to sign reports by such a person (usually the resident engineer) in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601 Reference the Contract ID number and KPDES number when one has been issued.*

Sub-Contractor Certification

The following sub-contractor shall be made aware of the BMP plan and responsible for implementation of BMPs identified in this plan as follows:

Subcontractor Name:

Address:

Phone:

The part of BMP plan this subcontractor is responsible to implement is:

I certify under penalty of law that I understand the terms and conditions of the general Kentucky Pollutant Discharge Elimination System permit that authorizes the storm water discharges, the BMP plan that has been developed to manage the quality of water to be discharged as a result of storm events associated with the construction site activity and management of non-storm water pollutant sources identified as part of this certification.

Signed _____ title _____ , _____
typed or printed name[1] *signature*

1. *Sub Contractor Note: To be signed by a person who is the owner, a responsible corporate officer, a general partner or the proprietor or a person designated to have the authority to sign reports by such a person in accordance with 401 KAR 5:060 Section 9. This delegation shall be in writing to: Manager, KPDES Branch, Division of Water, 14 Reilly Road, Frankfort Kentucky 40601. Reference the Contract ID number and KPDES number when one has been issued.*

Wolfe County – Mountain Parkway

Spill Prevention, Control and Countermeasure Plan

Introduction: This plan outlines the procedures, methods and equipment used at the Mountain Parkway project to comply with EPA oil spill prevention control and countermeasure standards, inspection, and training and record keeping requirements.

Project Information: The Mountain Parkway project is located in Wolfe County between mile points 43.1 and 46.2. The nearest tributaries are Swift Camp Creek and Trace Fork. Diesel fuel is used at this location and is delivered by truck and stored in appropriate tanks.

The maximum petroleum products stored at this location are 10,000 gallons.

Designated Person(s) Responsible for Oil Spill Prevention: Provided below is the name, address, office and home phone numbers of the designated person accountable for oil spill prevention and who reports to line management. The type of communication that will be used by the supervisor will be a mobile phone. In the event of a spill the following persons need to be contacted.

Preventive Maintenance Manager
Kevin Flanigin
3468 Lower Jackstown Road
Carlisle, KY 40311
Home Phone (859) 289-4422
Work Phone (859) 987-3670
Mobile Phone (859) 299-3999

Safety Director
Tracey Bubnick
455 Summit Pointe Drive
Somerset, KY 42503
Home Phone (606) 679-1146
Work Phone (859) 987-3670
Mobile Phone (606) 706-1031

Spill Prevention, Containment and Countermeasure Plan:

Potential Spill: The project contains a description of the location where experience indicates there is a reasonable potential for equipment failure (such as tank overflow, rupture, or leakage) and includes a prediction of the direction, rate of flow and total quantity of oil which could be discharged as a result of each major type of failure.

Containment: All the above ground storage tanks containing liquid petroleum products in excess of 600 gallons are located in a contained area. This containment area is designed to retain the capacity of the largest tank within the containment area.

The dike area will be provided with drain valve (diesel tank) if it isn't an earth embankment. Should rain water still accumulate within the dike area, excessive rain water accumulations will be checked visually for contamination; if uncontaminated, the rain water will be disposed of as normal storm water run off. Should contamination occur, a certified oil recycling company would remove the material. The containment will be 15ft wide, 35ft long, 3 ft high and will be capable of containing 110% of the largest tank within the containment.

Oil absorbent materials, shovels and garbage cans labels to indicate contained material.

Contingency Plan: This project has the manpower, equipment and materials required to expeditiously control and remove any harmful quantity of liquid petroleum discharged. Should an accidental release or spill occur the supervisor would immediately contain the spill to keep it from entering a stream or drainage way. Sand or another absorbent material will be stored adjacent to the containment area and be readily available in case of need. Additionally a backhoe or similar piece of equipment will be made available in case of an emergency. In the event of a release or spill the foreman will first notify Kevin Flanigin. Kevin will proceed to the site to assess the situation and facilitate a clean up. The second notification will be to Tracey Bubnick. Tracey will proceed to the site and assist with the clean up, as well as begin the notification and reporting of the incident. All materials from the clean up will be disposed of as required by the appropriate state and local ordinances. In addition, a copy of all Material Safety Data Sheets will be at the job location at all times in the event of an emergency.

Prevention Standards: The following are spill prevention and containment procedures for liquid petroleum storage tanks at this project:

(1) All the above ground liquid petroleum storage tanks are to be visually inspected weekly for leaks by on site personal.
(2) All liquid petroleum valves, pipelines and process units are to be visually inspected weekly (minimum) for leaks by the designated person(s).
(3) All liquid petroleum leaks are to be reported within 24 hours of their discovery.
(4) A running log is to be maintained on liquid petroleum tank liquid levels, liquid petroleum transfers, maintenance repairs, and inspections performed on the liquid petroleum storage systems and related piping.

Inspections and Records: All inspection required in this SPCC Plan is to be executed at the specified frequency rate. All records of these inspections and related liquid petroleum storage and maintenance operations are to be made available for a minimum of three years.

Security:

All valves that will permit direct outward flow of the tank's content to the surface are securely locked in the closed position when in non-operating or non-standby status.

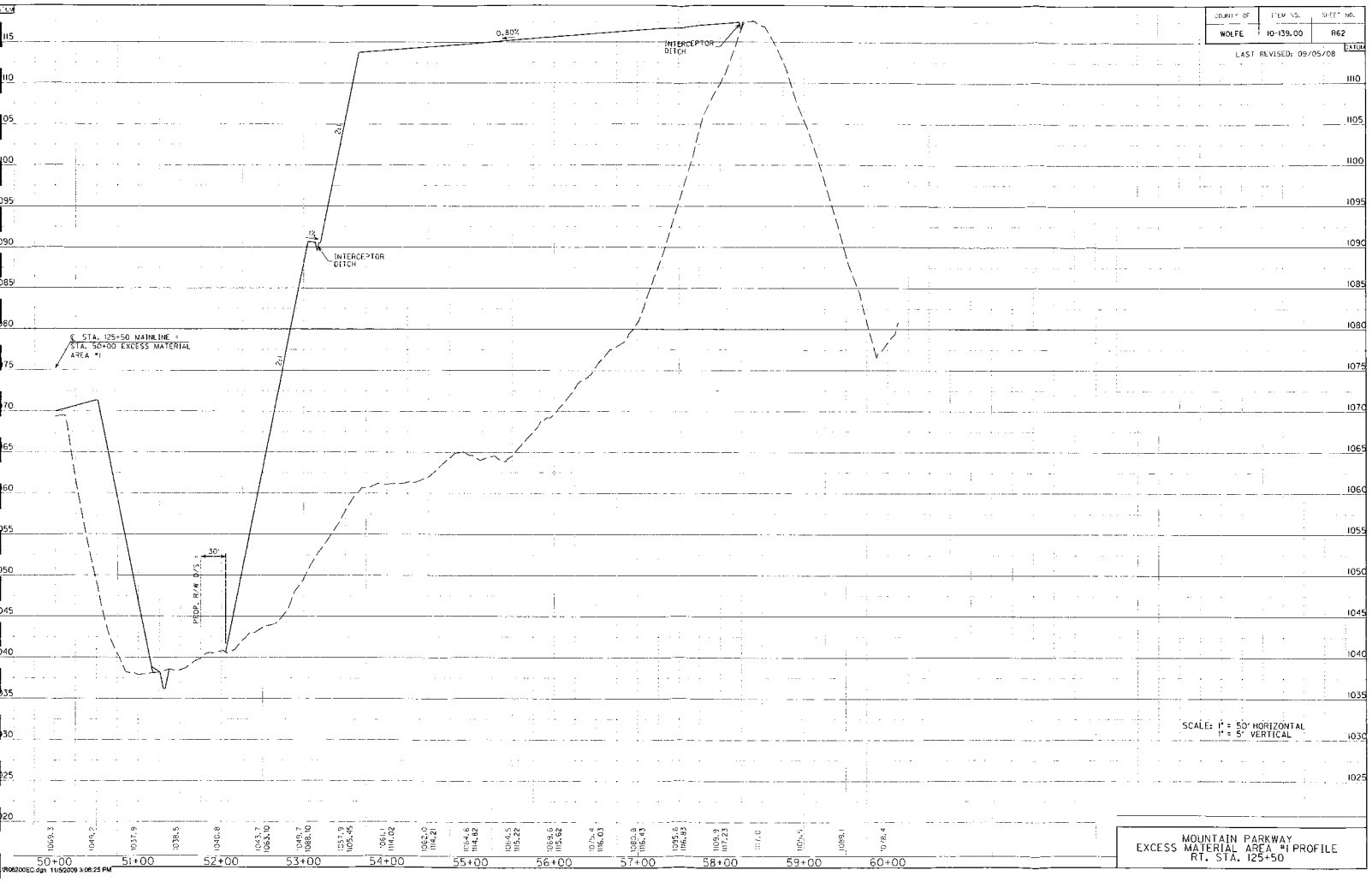
Personnel Training: All operating personnel will be instructed in the operation and maintenance of equipment to prevent the discharge of liquid petroleum products and applicable pollution control laws, rules and regulations. Spill prevention training will be scheduled and conducted for operating personnel at intervals frequent enough to assure adequate understanding of this SPCC Plan. The training will include a description of known spill events or failures, malfunctioning components, and recently developed precautionary measures. In addition, all records of inspections and related liquid petroleum storage and maintenance operations are to be made available for a minimum of three years.

Plan Review, Amendment and Certification:

This SPCC Plan will be reviewed and evaluated once every three years by the Spill Prevention Coordinator. The SPCC Plan is to be amended, if required, within six months of the review.

This SPCC Plan is to be amended whenever there is a change in plant design, construction, operation or maintenance procedure that materially affects the plant's potential for liquid petroleum spill. This SPCC Plan is to be amended within six months of the change.

All amendments to this SPCC Plan will be reviewed and certified by a Professional Engineer. Through this certification, the engineer attests that the SPCC Plan has been prepared in accordance with good engineering practices.



COUNTY OF	ITEM NO.	SHEET NO.
WOLFE	10-139.00	R62

LAST REVISED: 09/05/08

DATUM

SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL

MOUNTAIN PARKWAY
EXCESS MATERIAL AREA #1 PROFILE
RT. STA. 125+50

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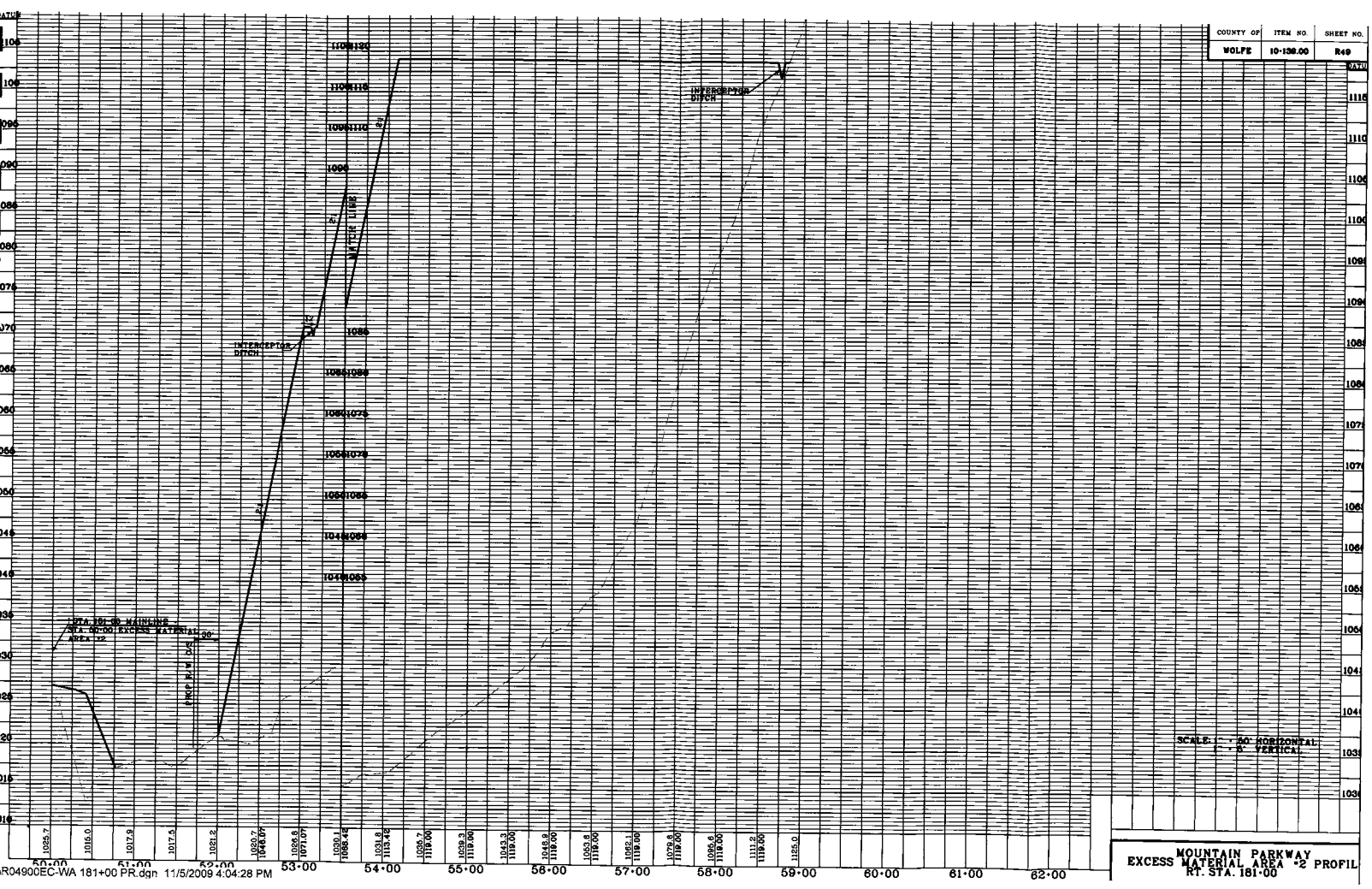

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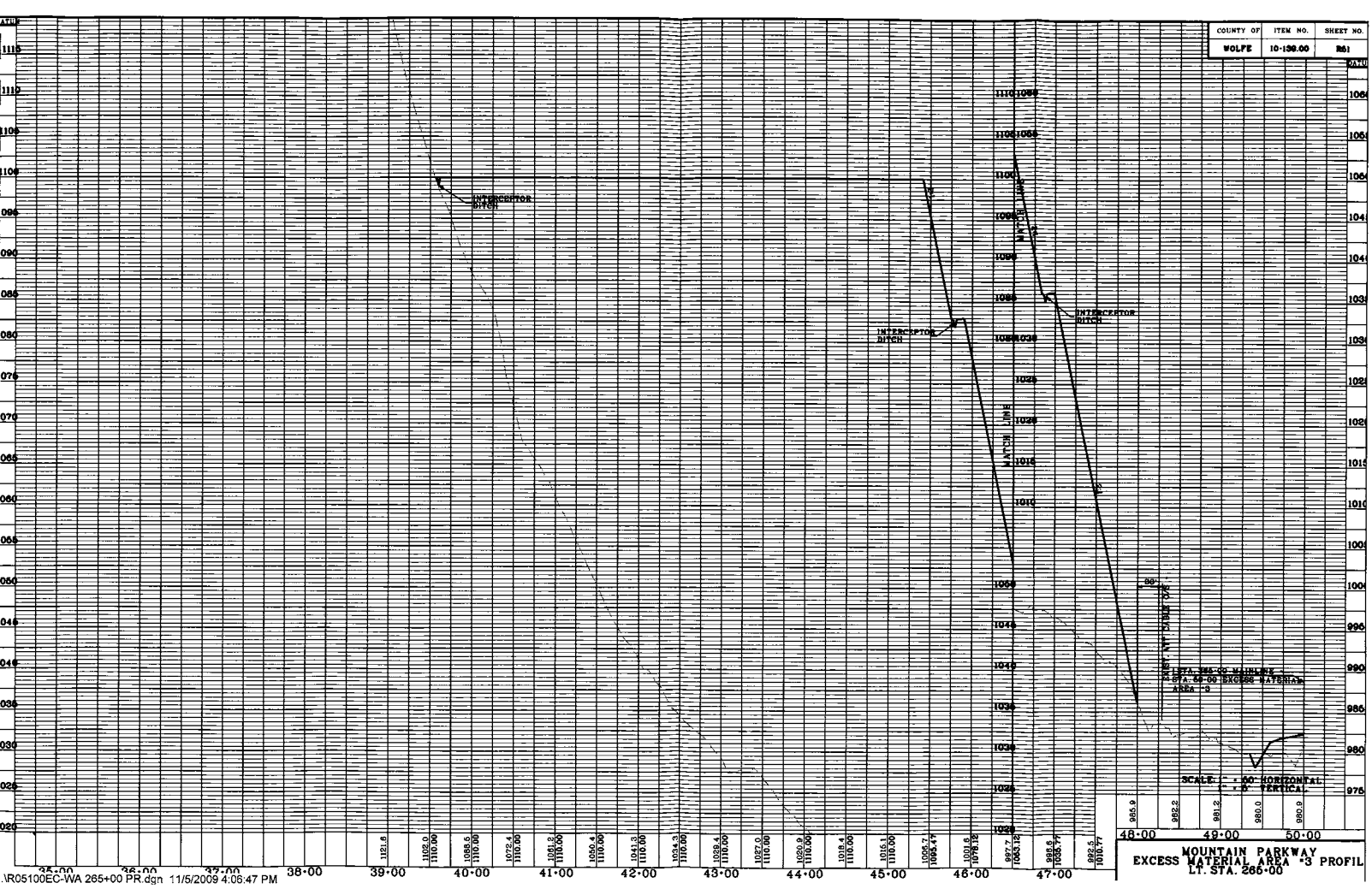
COUNTY OF
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R51
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30' BERM
STA. 266+00 MAINLINE
STA. 48+00 EXCESS MATERIAL
AREA #3
SCALE: 1" = 50' HORIZONTAL
1" = 5' VERTICAL
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